

Title (en)
Electro-optical device, driving method, and electronic apparatus

Title (de)
Elektrooptische Vorrichtung, Steuerverfahren und elektronisches Gerät

Title (fr)
Dispositif électro-optique, procédé de commande et appareil électronique

Publication
EP 1956583 A2 20080813 (EN)

Application
EP 08250382 A 20080201

Priority
JP 2007028062 A 20070207

Abstract (en)
An electro-optical device (1) includes a plurality of pixels (110) provided in association with intersections of a plurality of scanning lines (112) and a plurality of data lines (114). Each of the plurality of pixels has a pixel level corresponding to a voltage of a data signal supplied to one of the plurality of data lines associated with the pixel when one of the plurality of scanning lines associated with the pixel is selected. A method of driving the electro-optical device includes selecting the plurality of scanning lines in a predetermined order in each of first and second fields of one frame; when one of the plurality of scanning lines is selected in the first field, for each pixel located on the selected scanning line, supplying a voltage as the data signal to one of the plurality of data lines associated with the pixel, the voltage corresponding to a pixel level of the pixel and having one of a positive polarity and a negative polarity, the positive polarity corresponding to a voltage higher than a predetermined reference potential and the negative polarity corresponding to a voltage lower than the predetermined reference potential; and when the one of the plurality of scanning lines is selected in the second field, for each pixel located on the selected scanning line, supplying a voltage as the data signal to the one of the plurality of data lines associated with the pixel, the voltage corresponding to a pixel value of the pixel and having the other one of the positive polarity and the negative polarity. A ratio between lengths of the first field and the second field of the one frame is variable.

IPC 8 full level
G09G 3/36 (2006.01)

CPC (source: EP KR US)
G02F 1/133 (2013.01 - KR); **G09G 3/20** (2013.01 - KR); **G09G 3/36** (2013.01 - KR); **G09G 3/3614** (2013.01 - EP US);
G09G 3/2022 (2013.01 - EP US); **G09G 3/3648** (2013.01 - EP US); **G09G 2320/0204** (2013.01 - EP US); **G09G 2320/0247** (2013.01 - EP US)

Citation (applicant)
• JP 2005225169 A 20050825 - HITACHI CHEMICAL CO LTD
• JP 2000112437 A 20000421 - SEIKO EPSON CORP

Citation (examination)
US 2005104835 A1 20050519 - MISONOU TOSHIKI [JP], et al

Designated contracting state (EPC)
DE FR GB

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
EP 1956583 A2 20080813; **EP 1956583 A3 20090429**; CN 101241679 A 20080813; CN 101241679 B 20120321; JP 2008191561 A 20080821;
JP 5023725 B2 20120912; KR 20080074036 A 20080812; US 2008186296 A1 20080807; US 8217929 B2 20120710

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EP 08250382 A 20080201; CN 200810004806 A 20080202; JP 2007028062 A 20070207; KR 20080011297 A 20080204;
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